



Professor Andreas Stemmer

«My fascination for research lies in the exploration of the unknown, and in realizing the hitherto unthinkable. Fundamental research on the nanometer scale is all about understanding the working principles at these dimensions and how they're relevant to applications at larger scales.»

Nanotechnology Group – Department of Mechanical and Process Engineering

Our current research concentrates on charge transport in nanoscale and molecular electronic structures, biochemical and thermal energy harvesting, assembly of nanoscale building blocks into functional objects, and advanced scanning probe microscopy. We are a small team focused on fundamental research and unconventional ideas, located at the Binnig and Rohrer Nanotechnology Center on the IBM Research – Zurich campus in Rüschlikon.

Focus

- Spin currents in energy harvesting and electronics
- Self-assembling biofuel cells
- Light-matter interactions on the nanometer scale
- Instrumentation for single nanoparticle characterization

Tools and methods

- Wet lab
- Cleanroom
- Microscopes (light, electron, scanning probe)
- Electronic test equipment, lasers

Further details online:

www.nanotechnology.ethz.ch

